Phase 4 Watershed Plan
Implementation Committee

Report to the Legislature

December 2002

List of Participants

Committee Members:

Tom Anderson	PUD #1 of Whatcom County
Randy Black	Lakewood Water District
Greg Brizendine	East Wenatchee Water District
Rick Dieker	Yakima-Tieton Irrigation District
Joan Frey	Klickitat County
Steve George	Washington Hops Association
Mike Jeldness	Dungeness Water Users Assoc.
Betty Sue Morris	Clark County
Joe Peone	Confederated Tribes & Bands of the Colville Nation
Dick Price	Stevens County PUD #1
Doug Soehl	Trout Unlimited
Steve Tharinger	Clallam County
Hal Thomas	City of Walla Walla
David Troutt	Nisqually Tribe
Jay Watson	Hood Canal Coordinating Council & Chair of LEAG
Brian Winslow	The Boeing Company

Ecology Staff:

Dick Wallace	Department of Ecology
Gale Blomstrom	Department of Ecology

Consulting Services:

Andrew Graham	Economic and Engineering Services, Inc.
Bob Wubbena	Economic and Engineering Services, Inc.

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Executive Summary

The State's Watershed Management program was authorized by the Legislature in 1998. The program provides for locally-led, cooperative efforts to assess water resource needs and develop comprehensive and effective solutions at the watershed scale. These solutions are critical for local communities across the State. They are also an essential element in protecting natural ecosystems as growth continues. Watershed plans offer an important complement to the State's efforts to manage growth, protect threatened and endangered salmon runs, and improve water quality.

At this time, 33 "Planning Units" have formed in local areas around the state, to develop plans for 42 of the State's 62 Water Resource Inventory Areas (WRIAs). Some of these Planning Units are nearing completion of their plans, and many other plans will be completed in the next two to three years. Yet at this time many questions remain regarding how these plans will be implemented and whether funding will be available to carry them out. One point is clear: plans prepared in different WRIAs will be very different from each other, in terms of the recommended actions, level of detail, and expectations regarding the implementation process. Any efforts to provide a firm foundation for the implementation process must recognize this diversity.

During the 2001 Session, the Legislature authorized creation of a committee to review these issues. Governor Gary Locke subsequently invited a diverse group of watershed planning participants to serve on the Phase 4 Watershed Planning Implementation Committee. This report presents the results of their work.

Because funding needed for implementation requires a thorough understanding of the implementation process, the Committee understands its charge to be relatively broad, and to include elements such as:

- Developing an inventory of the types of activities that may be included in final watershed management plans, together with the costs of those activities.
- Developing an understanding of the overall context for implementing watershed plans, including the relationship to existing water-resource management programs and funding sources; and
- Developing an understanding of possible approaches to coordination and oversight of the implementation process, that may be applied in different WRIAs across the state, and understanding how this relates to possible funding sources.

This report is solely about the implementation phase ("Phase IV"), which will begin following final approval of a watershed plan by county legislative authorities in a given WRIA. It does not address Phases I, II, or III of the watershed planning process. These phases have been addressed by guidance manuals issued previously[1].

What Actions will be Included in Implementation of Watershed Plans?

In order to better understand implementation needs for watershed plans, it is important to understand what types of activities will be involved in the implementation phase. The Committee finds that implementing watershed plans will include three complementary elements:

1. Carrying out *actions* defined in the watershed plan. These actions include construction of infrastructure, restoration of physical characteristics of the watershed, and programmatic activities to improve watershed conditions or extend water supplies.

2. *Coordination and oversight* of the implementation process. This may include a number of interrelated activities, such as seeking funding; tracking progress towards implementation milestones; making adjustments to respond to new information and changing conditions; coordinating the many implementation actions being performed by different organizations in the watershed; and responding to local needs and concerns as expressed by elected officials, stakeholders and the public.

3. *Supporting activities.* These include public outreach and education; long-term monitoring activities and associated research; data management; and program evaluation.

General Findings

The State's watershed management program under Chapter 90.82 RCW encompasses a sweeping range of water-resource management issues. These include water supply, water quality, stream flow management, and habitat enhancement. These are vital issues for the future of the State, and the residents of every region. Therefore, sustaining the efforts begun in the planning phase, and providing a sound foundation for carrying out watershed plans, represents an important investment in future economic vitality and watershed health at both the local and statewide level.

At the same time, the watershed management program must still be considered an "experiment." The planning grants have provided a stimulus to diverse groups across the state. With local leadership and state agency support, these groups are shaping the future of their watersheds. Yet in virtually every WRIA, there is considerable uncertainty over how plans will be implemented. These experiments, though promising, could prove fruitless if momentum is lost during the transition from plan to action. By providing the organizational tools and financial resources needed for successful transition to the implementation phase, the Legislature can take a critical step in ensuring the watershed management program yields real results.

[1] *Guide to Watershed Planning and Management*, 1999; and *Guide to Watershed Planning and Management, Addendum No. 1*, 2001. Both were developed by a group of statewide associations in partnership with the Department of Ecology. Both documents are available from Ecology.

Out of 33 watershed plans currently under development, 20 are due for completion in years 2003 and 2004. This highlights the urgency for ensuring a sound foundation and funding sources are in place for implementation.

The Committee notes that in some parts of the State, water-resources planning is being pursued outside the framework of Chapter 90.82 RCW, but with many of the same characteristics of collaborative involvement and comprehensive scope. The Committee did not explore these alternate processes in detail, but notes that many of the findings and recommendations contained in this report may apply to those processes as well. In addition, planning processes outside the framework of Chapter 90.82 RCW may be worthy of funding for implementation activities, as long as they are carried out in a fashion that is consistent with the overall purpose and intent of the State's watershed planning program.

Importance of Coordination and Oversight During Implementation

Findings

The Committee believes that effective coordination and oversight of the implementation process in each WRIA will be critical to the success of watershed management. Some framework for coordination is needed, so the many actions included in each watershed plan, spanning diverse natural resources and community needs, will work together to meet the objectives intended by Planning Units. The framework for coordination and oversight must be locally designed, to fit into the existing pattern of relationships and responsibilities within each WRIA. Therefore, no single approach is recommended for statewide application. However, the Committee's recommendations are designed to offer planning units and implementing organizations with a range of options to fulfill this need. In addition, several changes to Chapter 90.82 RCW are recommended to provide the necessary legal underpinnings for successful coordination and oversight at the local level.

The Planning Units formed under Chapter 90.82 RCW play a vital role in analyzing watershed conditions in each WRIA, and identifying potential solutions to outstanding needs. Under the watershed management act, these Planning Units have no continued role identified after the Plan has been completed and approved. Moreover, Planning Units themselves have limited capabilities in terms of implementing specific actions recommended in the Plan. The Committee believes that the productive relationships and comprehensive outlook developed by Planning Units over a four-year period make them extremely valuable for continued involvement. One role that would clearly be appropriate for Planning Units or successor groups is continued oversight of Plan implementation, to ensure that actions carried out by various parties are consistent with Plan objectives, and to recommend updating or amendment of Plans from time to time.

Because of the importance of coordination and oversight functions, the Committee has also recommended the State provide financial support for this activity, for a period of time.

Recommendations to Planning Units and Implementing Organizations

- Chapter 90.82 RCW does not currently require development of an implementation plan, as part of a watershed plan. The Committee believes that Planning Units should develop as much of the implementation program as feasible during the Planning Phase (Phase III). However, in some areas this may prove very challenging, due to the comprehensive scope of the watershed plans, the number of organizations that may be involved in implementation, the inherent uncertainties associated with pursuing funding, and the potential need for negotiated agreements among implementing organizations. Therefore, where implementation details are not fully defined in the plan, Planning Units and implementing organizations should consider developing a detailed implementation plan within one year following final approval of the watershed plan by the county legislative authorities. An implementation plan would clearly define coordination and oversight responsibilities, any needed inter-local agreements, rules or ordinances, funding mechanisms and timelines for carrying out the actions recommended in the plan. The Planning Unit should also consider these elements, while they are developing their Watershed Plan in Phase 3, but many details will best be defined after the Plan is approved. If the Phase 4 grants discussed under Funding Approaches (see below) are created by the Legislature, then submittal of a detailed implementation plan should be a condition for receiving the grant in the second year and all subsequent years of the Phase 4 grant.
- Planning Units and implementing organizations should consider the five alternative approaches to coordination and oversight described in Section 3.3, as well as other approaches that may be applicable, and should determine which approach to carry forward into the implementation phase.

Recommendations to the Legislature

- The Legislature should expand the grant program in Chapter 90.82.040 RCW[2] to provide matching grants to support coordination and oversight of plan implementation, and should appropriate funds adequate for this purpose. The grant should be available only after a watershed plan has gone through the full approval process. Eligible expenditures during the first year of the grant would include, but not be limited to, development of a detailed implementation plan. Further funding in the second year and any subsequent years, would be contingent on submittal of an implementation plan. For further details, see Section 4.4.1.
- RCW 90.82 should be amended to provide for "Implementing Governments", as discussed in Section 3.4. These are local governments, tribal governments, or special districts that formally accept obligations for plan implementation. One role of the Implementing Governments should be to name a local "Implementation Lead Agency." The implementation lead agency would have the role of coordination and oversight during the implementation process.
- The Legislature should consider creating a new option in State law, for local areas to form a "Water Resources District." This district could be created at the option of voters in a watershed, and would have taxing authority to raise money for implementation of watershed plans. Further information on this proposal is included in Appendix B.

[2] For a copy of Chapter 90.82 RCW, see Appendix A.

- Chapter 90.82 RCW should be amended to explicitly state that Planning Units or successor groups may continue to operate after Plan adoption, in an advisory capacity to the organizations implementing plan provisions. The exact role and associated procedures for the Planning Unit during the implementation phase would be defined by the Implementing Governments. (Also see discussion of Planning Units' role in periodic review of implementation and need for plan updates, Section 6.1.)
- Chapter 90.82.130 (3) should be amended to recognize that state rules and county ordinances are not the only means that commitments can be made for implementing provisions of a watershed plan. The law should state instead that any organizations voluntarily accepting an obligation as defined in 90.82.130 (4) "shall adopt policies, procedures, agreements, rules and/or ordinances to implement the plan; and should annually review implementation needs with respect to budget and staffing." This requirement should not be limited to state agencies and county governments. The Committee notes that the original intent of Chapter 90.82.130 (3) and (4) appears to have been to ensure that entities that voluntarily accept "obligations" would follow through with implementation. This recommendation is intended to preserve this concept, while offering more appropriate and effective means for follow-through.

Funding Needs

At this time, efforts to estimate the funding needs associated with implementation of watershed plans can be only provisional at best. This is because few watershed planning units have yet defined the actions to be included in their watershed plans, and no planning unit has yet approved a watershed plan. The Committee has attempted to gain an understanding of these costs to an order of magnitude, by characterizing general categories of actions that have been identified by Planning Units, and reviewing representative costs for these types of actions. Costs are highly variable, and depend to a great degree on local needs and circumstances. Moreover, the number of projects in each category that will be recommended statewide is only conjecture at this time. Much better information on these needs will become available when a number of Planning Units have completed their plans, for example by the end of 2004.

Despite these limitations, the Committee has generated one estimate of possible needs, amounting to approximately $5.9 billion. Several caveats are in order regarding this figure. First, it is highly uncertain, due to the points discussed above. Second, it does not represent a need for State funding alone, since many costs may be borne, in part, by either local or federal sources, as well as private sector organizations. Third, these are not "new" needs, and they were not created by the watershed planning process. Instead, watershed plans will likely group many needs together that have already been identified through other processes, such as habitat restoration efforts, water and wastewater system plans, irrigation district needs, and water quality programs. Traditionally, these costs have been kept in separate "boxes," based on the way that regulatory and funding programs are organized at either the State or federal level. Because watershed planning is intentionally comprehensive, all of these costs become additive in the context of a watershed plan.

Finally, the Committee emphasizes that watershed plans offer the potential to improve the return on investment from water-resource infrastructure projects and programs. This is because the watershed planning process offers a means to define and review proposed projects and programs

from a comprehensive perspective. Planning units striving to meet multiple objectives for people and the environment simultaneously, will, it is hoped, package actions together that are naturally complementary, rather than counteractive. Moreover, to the extent that watershed plans do a good job of defining local priorities, they will help make informed choices about how investments in water resource should be spent.

Funding Approaches

Findings

The Committee believes that funding for implementation of watershed plans will need to involve a combination of local, state, and federal sources, and, in some cases, contributions from private sector organizations. This report focuses more on local and state funding sources, because the Committee believes that its efforts can be most useful in the state and local context. However, the Committee emphasizes that federal and private sources may be equally as important as local and state sources of funding for implementation of watershed plans.

Some Committee members have indicated that local governments, particularly multipurpose governments, will be hard pressed to contribute funds for water resource management. They point out that the public in local areas is weary of new fees and taxes, and that other priorities are higher on the public agenda at the local level. Other Committee members believe that local governments and special districts must take a part in financing water resource management actions, and that public support can be obtained through sustained efforts at education and outreach. In the end, both of these perspectives carry weight, applying in varying degrees within each of the State's 62 WRIAs.

Because the Committee received its charge from the Legislature, it devoted considerable attention to how the State can help to finance implementation of watershed plans. As discussed above, the Committee believes that grants to support coordination and oversight of the implementation process would be extremely valuable in ensuring the watershed planning "experiment" yields successful results. This can be achieved with a relatively modest level of funding. For example, this could be supported by a State contribution of approximately $2 million per year, over a period of seven to ten years, as the various planning units transition to the implementation phase.

Financing the various projects and programmatic activities recommended in watershed plans will require much more substantial funding. As noted above, one estimate indicates this need will be in the billions, although this cost may be shared by the local and federal levels. The Committee has identified two, complementary approaches for the State to contribute its share of this need.

First, many of the infrastructure projects recommended in watershed plans will be consistent with eligibility requirements of existing funds such as the Centennial Clean Water Fund, Salmon Recovery Fund, Public Works Trust Fund, Clean Water State Revolving Fund, and others. The various existing State funding programs should be examined carefully to determine how current revenue streams can contribute to funding implementation of watershed plans.

Second, the Committee anticipates that funding needs for effective water resource management will exceed the capacity of these existing funds by a considerable margin. Therefore, the Legislature should consider establishing a new source of revenue to pay for needed infrastructure. Several principles for such a program are outlined in this report, and number of alternative proposals are reviewed.

Recommendations to Planning Units and Implementing Organizations

- As Planning Units develop their watershed plans in Phase 3, they should identify potential funding sources, including local, state, federal and private sector sources. However, it is recognized that funding arrangements may not be fully defined or finalized during the Planning Phase, and may need to be deferred to the implementation phase (Phase 4).
- With respect to local contributions to implementing plans, potential contribution of in-kind goods and services should be considered, as well as financial contributions.
- Where planning units identify local revenue sources to be used in implementing watershed plans, they should also consider how efforts to develop new local revenue sources may require outreach activities to ensure the public supports these sources.
- Planning units should anticipate that funding requests for projects listed in their watershed plans will be reviewed in the context of other water-related projects in their respective WRIAs. Planning Units should consider how their recommended actions fit into the overall context of all water-resource funding needs in their WRIAs.

Recommendations to the Legislature

- The Legislature should expand the grant program in Chapter 90.82.040 RCW to provide matching grants to support coordination and oversight of plan implementation, and should appropriate funds adequate for this purpose. The local match should be at least 10 percent but no greater than 25 percent, and in-kind contributions should count towards the local match requirement. The State grants should phase out over a five-year period. For further details, see Section 4.4.1.
- The Legislature should provide policy direction to the various agencies, boards and commissions that manage state funding programs to indicate that funding for implementation of watershed plans is a State priority. The Legislature should direct these agencies, boards and commissions to jointly review how their programs can support implementation of watershed plans. A progress report on this review should be completed by December 31, 2003 and results should be provided to both the Legislature and Department of Ecology. The Legislature should direct the Department of Ecology to assist with this effort, coordinate the joint review, and provide necessary information on watershed plan implementation to the respective funding entities. For review elements and further details, see Section 4.4.2.
- The Committee recommends that State agency staff responsible for providing input to federal agencies on funding programs undertake a similar review of key federal funding programs, similar to that described for State funding sources above. This applies particularly to State agency staff involved with federal programs administered by the US Environmental Protection Agency, US Department of Agriculture, Bureau of Reclamation, US Army Corps of Engineers, and Bonneville Power Administration.

- The Legislature should enact a new revenue program, to generate substantial funds for water-related infrastructure projects, as well as watershed management programs. This program should take into consideration the following principles:
  - Funding sources should be fair and equitable. This includes elements such as a broad-based application reflecting the broad uses and benefits of water resources in the state; and avoidance of "double-taxing" those who have already paid for improvements in water resource management in other ways.
  - If possible, there should be a clear linkage between the source of revenue, and water resources, so the public understands why the money is being collected.
  - Collection of revenues should be practical, without needing extensive new administrative arrangements or procedures. For example, distribution of funds using one of the State's existing funding programs would be preferable, over creation of a new administrative structure.
  - The source of revenue must have political support, or at least neutrality. This includes avoiding the perception of "excessive" fees or taxes on one sector of the economy (e.g. agriculture), or on specific industrial plants that are particularly critical to economic health and employment within a given city or region.
- The Legislature should consider amendments to existing laws regarding actions and expenditures authorized for cities, counties, and special districts involved in water resources management, to allow these entities to contribute financial support to watershed-wide actions that benefit their respective constituents or customers.
- Consideration should be given to amending the Interlocal Coordination Act, to allow watershed-based coordination and funding. There may be ways to provide for collaborative payoff of bonds for capital facilities as well, although. However, it should be noted that the Committee has not explored this recommendation in detail.
- The Legislature should consider creating a new option in State law, for local areas to form a "Water Resources District." This district could be created at the option of voters in a watershed, and would have taxing authority to raise money for implementation of watershed plans. Further information on this proposal is included in Section 3.3 and Appendix B.
- The Legislature should consider authorizing local governments, at their option, to impose a new source of revenue linked to water resources. The purpose of this new option would be to raise money at the local level to implement watershed plans. This authorization should include a requirement that local governments may not impose this revenue source unless it is approved by local voters. This concept is described further in Section 4.3.
- The Legislature should consider how funding requirements for environmental mitigation of major projects, including transportation projects, could be applied to implementation of watershed plans to maximize environmental benefits at the watershed level.

Monitoring, Data Management, and Related Issues

Sound information on watershed conditions and trends is vital to management of water quantity, water quality, habitat, and instream flows. The Committee discussed needs in this regard, for the implementation phase. These needs are above and beyond those addressed in the Assessment

Phase (Phase 2) of developing a watershed plan. Some Planning Units may identify monitoring and data management as an important need. In other WRIAs this may not be an issue. The Committee identifies the following general recommendations with regard to monitoring, data management, and related issues.

Recommendations to Planning Units and Implementing Organizations

- Planning units or implementing organizations should consider the need for monitoring, data management, and data sharing programs as a component of the implementation plan recommended in Section 3.7 of this report. The discussion of monitoring and data management should address the purposes of data collection, the need for sustained efforts to update key data, coordination of monitoring activities, and provisions for data management. For each action, or group of actions, listed in a watershed plan, identify what kind of information will be needed to assess effectiveness and determine when changes may be needed.
- Planning units or implementing organizations should identify specific funding needs related to monitoring and data management, and should review options at the local, state and federal levels, to meet this need.
- The Committee recommends that Watershed Planning Units refer to the Monitoring Oversight Committee's (MOC) work, as they devise their own programs for monitoring at the WRIA or subbasin scale. Many of the concepts developed by the MOC at the statewide scale may be transferable to the WRIA or subbasin scale. The differences in purpose and scale discussed in Section 5.2 should be recognized as this is done.
- Information gaps should not be used as an excuse to prevent action. Planning units or implementing organizations should weigh the need for improved information against the costs associated with pursuing additional information and the risks of delaying water resource and watershed management decisions.

Recommendations to State Agencies and Monitoring Oversight Committee

- Statewide monitoring and information systems should not be limited to activities centered only on salmon recovery. Rather, these efforts should address a broad range of water-resource information, including demographic growth, land use, water rights and water uses.
- The State should develop improved monitoring programs to meet statewide needs, including improved coordination among State agencies. These programs should also consider the need for improved monitoring capabilities at the WRIA and subbasin scale.
- As data management and data access systems are developed or improved, they should provide for retrieval of data on the geographic basis of watersheds.
- Regional or statewide data centers should be established to store water resource and habitat data, and to provide access to this data to watershed managers and the public. Linkages to local implementation of watershed plans should be provided for.

Recommendations to the Legislature

- The Legislature should consider funding ongoing efforts to improve and update watershed information in areas where Planning Units determine that data limitations preclude effective watershed management actions.
- The Legislature should recognize that efforts to improve data gathering, management, and coordination at the statewide level cannot substitute for the need for data at a finer scale of resolution, at the WRIA or subbasin scale.

Flexibility and Adaptation

Watersheds are continually changing, and information and scientific understanding can improve over time. Watershed plans will need to be updated or amended from time to time, in response. In addition, some aspects of implementation have uncertainties, due to funding needs, permitting, and other factors. The Committee reviewed the need for flexibility and adaptation in the implementation process. The following recommendations are provided.

Recommendations to Planning Units and Implementing Organizations

- Provisions to allow for "day to day" management decisions; periodic review of progress towards implementation; and occasional updating or revision of the watershed plan should be built into the Implementation Plan recommended in Section 3.7.

Recommendations to Legislature

- The Legislature should amend Chapter 90.82 RCW to provide for periodic review of approved watershed plans, and to allow for amendment of plans if needed. The review should be carried out by Planning Units, or a similar successor group, as discussed above. However, this review should be advisory only. Actual decisions regarding when to amend a plan, what to amend, and how to carry out and finance the amendment process should be at the discretion of the Implementing Governments described in Section 3.4. Approval of amendments to a plan should be through a process involving the county legislative authorities, following the procedures outlined in Chapter 90.82.130 RCW, for approval of the original watershed plan. Once approved, the "obligations" voluntarily accepted by implementing organizations should become binding, as per the provisions of Chapter 90.82.130 (see related recommendation above on amending this section of the law.)
- The Legislature should consider providing funding for periodic updates of watershed plans in the future, where there is a demonstrated need identified by the local planning unit or successor organization.

Additional Discussion

In addition to the topics discussed above, the Committee reviewed two additional issues related to implementation of watershed plans.

One of these was potential modifications to State water law. These discussions proved to be very challenging. While the Committee did not provide extensive findings or recommendations on this topic, the content of its discussions on water law can be found by reviewing Appendix C. It is anticipated that some watershed plans may also identify specific changes suggested for State rules and statutes.

The Committee also briefly reviewed considerations related to the State and National Environmental Policy Acts (SEPA and NEPA). However, because the Department of Ecology has been undertaking a comprehensive effort to develop a statewide Environmental Impact Statement for use by Planning Units, the Committee did not address this topic in detail.

Closing Remarks

The Committee hopes that the conclusions and recommendations presented in this report prove useful to the Legislature and others in looking ahead to the implementation phase of the watershed management program. Considerable progress in terms of planning has been made since passage of Chapter 90.82 RCW. Following through on the recommendations provided in this report will help to ensure that planning units, lead agencies and implementing organizations have the tools and resources they need to carry out their watershed plans successfully, thereby bringing the watershed management program to fruition. This can provide a basis for current and future economic vitality and watershed health across the State.

Section 1
Introduction and Purpose

In 1998 the Washington State Legislature authorized a new program to provide for Watershed Planning throughout the State (Chapter 90.82 RCW). This voluntary grant program provides funding for local watershed planning units to develop watershed management plans. Each plan may cover a geographic area encompassing one or more of the State's 62 Water Resource Inventory Areas (WRIAs). Planning Units have a time period of four years from the time they begin Phase 2 to the time they complete their watershed plans. Planning units, if formed, must address water quantity issues within their selected WRIA(s). They also have the option to address water quality, habitat and instream-flow setting.

The Planning Process under Chapter 90.82 RCW is divided into three phases. Phase 1 involves organizing a watershed planning unit and defining the scope of the planning activity. Phase 2 involves assessing watershed conditions. Phase 3 covers development of the watershed management plan.

At this time a number of Planning Units are nearing completion of Phase 3. There is considerable interest across the state in examining how watershed plans can be implemented following their completion. With reference to the three-phase process of developing a plan, this implementation activity can be considered "Phase 4." This Report to the Legislature addresses "Phase 4" implementation of watershed plans.[1]

1.1 Legislative Authorization and Committee History

During the 2001 Session, the Legislature passed a budget proviso which authorized creation of "a blue-ribbon panel to develop long-term watershed planning implementation funding options." Governor Gary Locke subsequently invited a diverse group of watershed planning participants to serve on the Phase 4 Watershed Planning Implementation Committee. Members of the Committee are listed on page i of this report. In forming the Committee, careful consideration was given to balancing interest groups involved in the watershed planning process and providing geographic representation from across the State.

The Department of Ecology (Ecology) received funding to set up and staff this activity. Ecology retained the services of a consulting firm, Economic and Engineering Services, Inc., to facilitate Committee discussions and assist in development of this report. Together with personnel from Ecology's watershed planning support team, this comprised the Committee staff.

The Committee held a series of 7 meetings, from April through October, 2002 to identify key issues related to funding and implementation of watershed plans and develop recommendations to the Legislature and individual planning units. Because funding needed for implementation

[1] Phases I, II and III have been addressed in two guidance manuals: *Guide to Watershed Planning and Management*, 1999; and *Guide to Watershed Planning and Management, Addendum No. 1*, 2001. Both were developed by a group of statewide associations in partnership with the Department of Ecology. Both documents are available from Ecology.

requires a thorough understanding of the implementation process, the Committee understands its charge to be relatively broad, and to include elements such as:

- Developing an inventory of the types of activities that may be included in final watershed management plans, together with the costs of those activities.
- Developing an understanding of the overall context for implementing watershed plans, including the relationship to existing water-resource management programs and funding sources;
- Developing an understanding of possible approaches to coordination and oversight of the implementation process, that may be applied in different WRIAs across the state, and understanding how this relates to possible funding sources.

It should be noted that, as the Committee carried out its assignment, no watershed plans had yet been completed, except a limited number in draft form. Therefore, the actions to be recommended in watershed plans could not be defined in detail. The Committee identified categories of actions, and used available information from those planning units nearing their completion dates to estimate needs. However, due to this limitation, some of the conclusions and recommendations in this report may need to be refined or modified at the time watershed plans are approved and adopted in WRIAs across the State.

This report was initially issued in draft form, and was made available for public comment in October 2002. On November 19, 2002, a public workshop was held to address watershed plan implementation and investment in the State's water resources infrastructure. This workshop included participation by several legislators from legislative committees that oversee the watershed planning program, as well as Governor Gary Locke. The discussion and comments from the workshop, as well as written comments provided by the public, were reviewed and discussed by the Committee in December 2002. Based on this information, several revisions were made to the report. A full list of comments and responses is included in Appendix H, incorporating feedback from both the workshop and written comments received.

1.2 What Actions will be Included in Implementation of Watershed Plans?

In order to better understand implementation needs for watershed plans, it is important to understand what types of activities will be involved in the implementation phase. The Committee finds that implementing watershed plans will include three complementary elements:

1. Carrying out *actions* defined in the watershed plan. These actions are described in Section 2, and generally include construction of infrastructure, restoration of physical characteristics of the watershed, and programmatic activities to improve watershed conditions or extend water supplies. It is anticipated that these actions will be the most costly of the three types of activities described here.
2. *Coordination and oversight* of the implementation process. This may include a number of inter-related activities, such as seeking funding; tracking progress towards implementation milestones; making adjustments to respond to new information and changing conditions; coordinating the many implementation actions being performed by different organizations in

the watershed; and responding to local needs and concerns as expressed by elected officials, stakeholders and the public. Coordination and oversight of the implementation process will require funding and staffing, but will have relatively modest cost implications, compared with the cost of carrying out specific projects and programs.

3. *Supporting activities.* These include public outreach and education; long-term monitoring activities and associated research; data management; and program evaluation. These supporting activities can involve a wide range of costs, depending on the type of activity involved.

The way these three elements interact will vary substantially, depending on the content of individual watershed plans. Likewise, their impact on the implementation phase will vary. It is important to note that these three elements need not be performed by a single organization. Just as the planning process is designed as a collaborative, multi-party effort, so will implementation likely require coordinated actions by a variety of organizations in each watershed. Because of this, there is no single organizational model that can apply to all WRIAs in the state. This has important implications for how the implementation process is organized and funded in each WRIA. These issues will be explored further throughout this report.

1.3 Current Status of Watershed Planning Activity

This section briefly summarizes the current status of watershed planning efforts from around the state. Table 1-1 lists all active Planning Units, together with their watershed planning grant phase as of October 2002, and the due date for their watershed plans. The Water Resource Inventory Areas (WRIAs) associated with these Planning Units are displayed in Exhibit 1-1.

Table 1-1
2514 Watershed Planning Status as of October 2002

WRIA	Name	Phase [2]	Plan Due	WRIA	Name	Phase [1]	Plan Due
1	Nooksack	3	Fall 03	30	Klickitat	3	Sum 04
2	San Juan	3	Fall 03	31	Rock Glade	1	2007
3/4	Low/Upper Skagit	3	Fall 03	32	Walla Walla	3	Sum 05
6	Island	3	Spr 05	34	Palouse	1	2007
11	Nisqually	3	Fall 03	35	Middle Snake	1	2007
12	Chambers/Clover	3	Fall 04	37/38/39	Yakima/Naches	3	Fall 03
13	Deschutes	3	Fall 04	43	Upper Crab-Wilson	1/2	Fall 06
14	Kennedy-Goldsborough	3	Win 05	44/50	Moses Coulee/Foster Creek	3	Fall 04
15	Kitsap	3	Spr 05	45	Wenatchee	2	Sum 05
16	Skokomish-Dosewallips	3	Win 05	46	Entiat	3	Fall 03
17	Quilcene-Snow	3	Win 04	48	Methow	2	Fall 03
18	Elwha-Dungeness	3	Fall 03	55/57	Low/Middle Spokane	3	Win 04
19/20	Lyre-Hoko/ Soleduck/Hoh	2	Sum 05	56	Hangman	3	Win 04
22/23	Lower/Upper Chehalis	3	Win 04	59	Colville	3	Fall 04
25/26	Grays-Elochoman/Cowlitz	3	Sum 04	60	Kettle	2	Spr 06
27/28	Lewis/Salmon-Washougal	3	Sum 04	62	Pend Oreille	3	Fall 04
29	Wind/White Salmon	2	Spr 05				

[1] Phase 1, 2, or 3 refers to whether grant funds have been received for that phase.

As shown in the table, 33 separate Planning Units are engaged in the watershed planning process. Collectively, they cover 42 of the State's 62 WRIAs. Due dates for watershed plans are distributed as follows:

- 2003 - 8 plans due
- 2004 - 12 plans due
- 2005 - 8 plans due
- 2006 - 2 plans due
- 2007 - 3 plans due

Since over half of these plans will be completed during 2003 and 2004, it is vital that implementation issues and funding sources be addressed quickly.

Additional information on specific WRIAs and the watershed planning process can be found on the Washington State Department of Ecology Web site at:

- http://www.ecy.wa.gov/watershed/index.html

In addition, information on WRIAs is included in the November 2001 report by the Office of Financial Management entitled Assessment of Watershed Planning - Report to the Legislature. An update to this report is anticipated early in 2003.

1.4 Watershed Planning Outside Framework of Chapter 90.82 RCW

The Committee notes that in some parts of the State, water-resources planning is being pursued outside the framework of Chapter 90.82 RCW, but with many of the same characteristics of collaborative involvement and comprehensive scope. The Committee did not explore these alternate processes in detail, but notes that many of the findings and recommendations contained in this report may apply to those processes as well. In addition, planning processes outside the framework of Chapter 90.82 RCW may be worthy of funding for implementation activities, as long as they are carried out in a fashion that is consistent with the overall purpose and intent of the State's watershed planning program.

1.5 Content of this Report

Following this introductory section, this report contains Sections 2 through 7, as follows:

- Section 2: Assessment of Planned Actions and Funding Needs
- Section 3: Role of Coordination and Oversight in Implementing Watershed Plans
- Section 4: Funding Implementation of Watershed Plans
- Section 5: Monitoring, Data Management and Related Issues
- Section 6: Flexibility and Adaptation in Plan Implementation
- Section 7: Conclusions

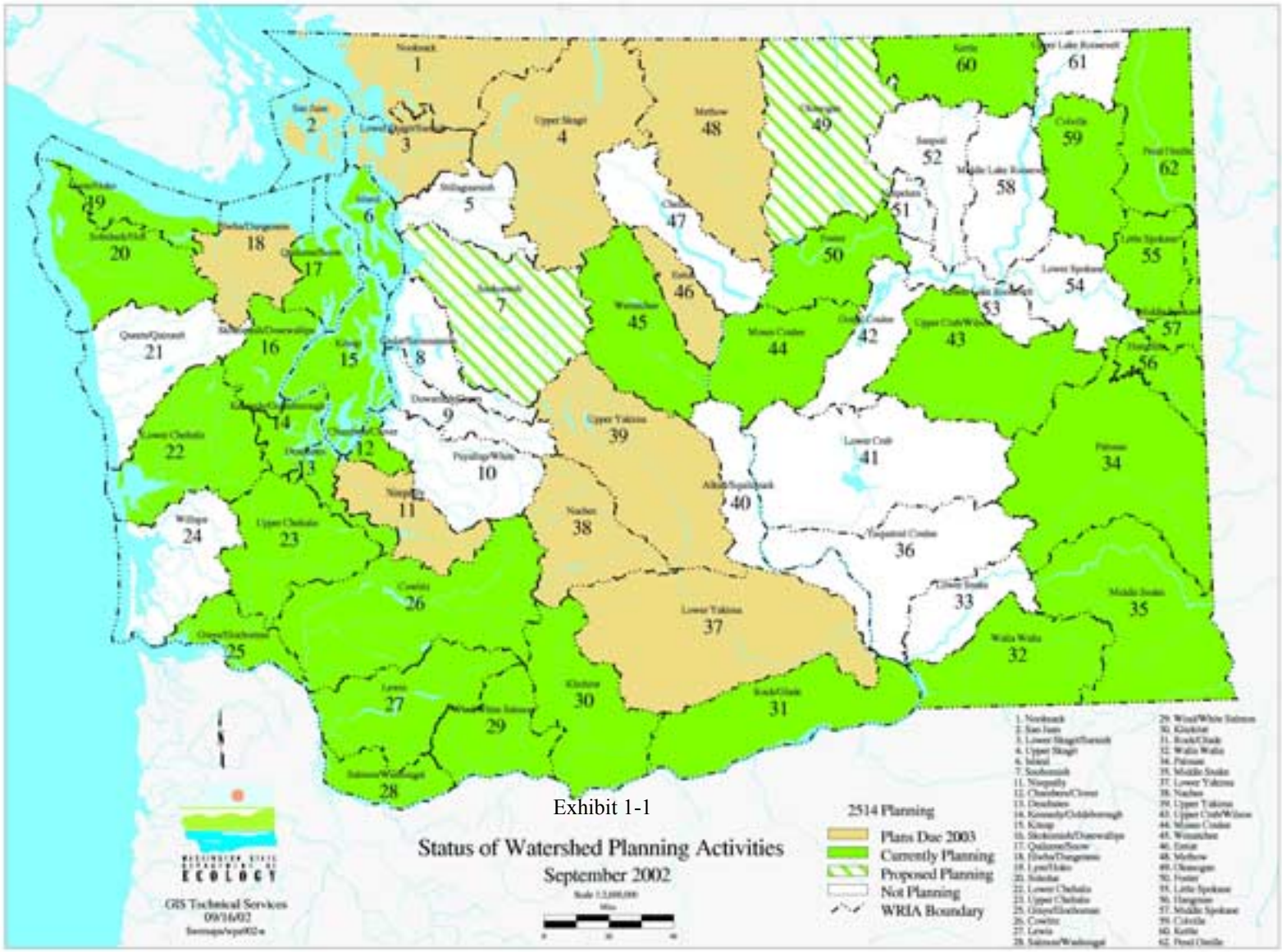
Status of Watershed Planning Activities
September 2002
2514 Planning
Plans Due 2003
Currently Planning
Proposed Planning
Not Planning
WRIA Boundary
ECOLOGY
GIS Technical Services
09/16/02

Exhibit 1-1

Section 2
Assessment of Planned Actions and Funding Needs

In order to anticipate and prepare for implementation challenges, it is important to take inventory of the kinds of actions that will be included in approved watershed plans. While the Watershed Management Act itself provides guidance on plan content, the real details will emerge from individual planning units around the state.

This Section summarizes available information on projects and programs that may be included in watershed plans. In addition, this Section presents estimates of potential funding needs for implementing these projects and programs. Throughout this Section, it should be noted that *most Planning Units have not yet defined the list of actions that will be included in their watershed plans*. Therefore, this effort is preliminary, and relies on many assumptions. The information presented in this Section will need to be updated as watershed plans are completed and approved.

As noted in Section 1 of this report, the Committee has identified three complementary elements for implementing watershed plans in each WRIA:

1. *Actions* defined in the watershed plan, including construction projects, watershed restoration activities, and implementation of specific programs;
2. *Coordination and oversight* of the implementation process;
3. *Supporting activities*, including long-term monitoring of watershed conditions, data management, and public education and outreach activities.

Each of these elements is discussed in this Section. However, the majority of the discussion centers on the first element, since it is anticipated that this will be the most costly, and is also the element that will produce the results intended by the planning program. The Committee also notes, however, that the remaining two elements are essential in ensuring that actions can be carried out effectively, and that funds for carrying out watershed actions are invested for maximum benefit.

2.1 Assessment of Planned Actions

During Spring 2002 the Department of Ecology (Ecology) surveyed Planning Units to determine what actions were anticipated for inclusion in watershed plans. This effort was undertaken as part of the process of developing a statewide Environmental Impact Statement (EIS) for watershed plans. Staff of the Phase 4 Watershed Plan Implementation Committee collaborated with Ecology staff in designing the survey, to ensure that information gathered could also be used for assessing actions and funding needs. The survey included a set of open-ended questions regarding the types of projects or programs they anticipated including in watershed plans.

The surveys were distributed to Planning Units through 14 Department of Ecology watershed leads representing, at that time, 32 watershed planning efforts in 41 Water Resource Inventory Areas. The purpose of distributing the questionnaire through the leads was to allow them an opportunity to provide background information to the Planning Units concerning the Phase 4 effort and the statewide Watershed Planning EIS, as well as to explain the purpose of the questionnaire. Six Planning Units provided written responses to the questionnaires. This information was supplemented by interviews of five watershed leads representing an additional nine watershed planning efforts. A number of the watershed leads and lead agencies that did not provide responses to the questionnaire indicated that their planning efforts had not advanced to the point where specific actions had been identified for inclusion in their watershed plan. Others indicated that while there had been some initial deliberation concerning actions that might be included in their watershed plans, they considered the identified actions too tentative or preliminary to identify as probable elements of their plans.

In summary, efforts to inventory actions that will be included in watershed plans can offer only provisional results at this time. The survey process did not yield a list of well-defined projects and programs that will need to be implemented. However, based on the survey, Ecology was able to assemble a comprehensive list of action categories under consideration by planning units from around the state. In order to use this list for estimating potential costs of implementation, staff of the Phase 4 Watershed Plan Implementation Committee modified it slightly to improve definition among categories and capture additional elements such as needs for watershed monitoring. With these modifications, the list of action categories gathered from Planning Units is presented in Table 2-1.

Table 2-1
Potential Actions Identified by Planning Units [1]

Water Quantity Projects or Programs
Water Conservation
- Municipal and industrial projects
- Irrigation district projects
- On-farm projects
Water Management and Transfers
- Voluntary transfers to Trust Water Right Program
- Agreements to share regional supplies
- Adjudication of a basin or sub-basin
- Watermaster for basin, sub-basin, or other area
- Enforcement against illegal water use
- Identify existing water rights subject to relinquishment
- Minimize use of wells
- Restrict siting of wells in proximity to stream
- Restrict finished depth of new wells to second aquifer unit or less
- Alter operations of existing storage facilities
Protect or Enhance Hydrologic Functions
- Manage runoff timing and quantity
- Protect/restore floodplains and wetlands to store water
Reclamation and Re-use
- Construct and operate reclamation and reuse facilities
Development of New Supply
- New wells
- New stream diversions

Table 2-1 (cont)
Potential Actions Identified by Planning Units [1]

Water Quantity Projects or Programs (cont.)

Storage and Supply Infrastructure
- New or upgraded surface storage (on-channel or off-channel)
- Aquifer storage and recovery (ASR)
- New pipelines or interties

Water Quality Projects or Programs

Point Source Pollution Control
- Construct reclamation and reuse facilities
- Create a pollution trading system
- Assist industries and municipalities improve wastewater discharge quality
- Require hatcheries to follow Hatchery Scientific Review Group recommendations
- Increase inspections of dairies and enforcement of regulations

Non-point Source Pollution Control
- Modify irrigation/conservation districts mgt. plans to meet Total Maximum Daily Load (TMDL) requirements
- Conservation districts to update farm plans
- Implement recommendations of the Forest and Fish Report
- Implement existing water quality plans
- Public education program
- Measure non-point source pollution
- Stormwater management plans

Activities on Land and Along Shorelines
- Update and adjust local land use plans, shoreline programs, critical areas ordinances to achieve consistency with watershed plans

Habitat Projects or Programs

Instream Modifications
- Modifications to promote fish passage and habitat
- Estuary restoration

Out-of-stream Modifications
- Riparian habitat restoration
- Floodplain restoration and channel maintenance

Land/Shoreline Use Modifications
- Implement land use and shoreline plans to protect habitat and control floodplain development
- Control sources of sediment
- Integrate habitat improvement planning into flood hazard reduction plans
- Modify management plans of irrigation and conservation districts
- Purchase conservation easements
- Enforce Shoreline Management Act in critical habitat areas

[1] While each of these actions may be included in some watershed plans, it is unlikely that any individual watershed plan would contain all of the actions listed.

At this time, assessment of the actions that may be included in watershed plans is limited to this general list. Given the status of information available at the time the Committee prepared this report, it is not possible to provide a definitive listing of the number or location of projects in each category, nor to define the scope or extent of these activities in the various WRIAs. Nonetheless, this list of action categories is useful in shaping assumptions and expectations about implementation needs. In this context, the list of action categories in Table 2-1 will be used as the basis of discussion throughout the remainder of this report.

For purposes of evaluating implementation needs, it is useful to draw a distinction between ***capital projects*** and ***programmatic activities***. Within each of the main categories above (water quantity, water quality, and habitat), both capital projects and programmatic activities are listed. For example, under the water quantity grouping, water rights transfers would generally be implemented through programmatic activities; while construction of reclamation and reuse facilities would consist primarily of capital projects. This has implications for various aspects of implementation, including the timing and duration of funding needs; legal authorities to carry out specific actions; and the roles and responsibilities of various entities in implementing the watershed plan. Therefore, this breakdown of capital projects and programmatic activities will be discussed throughout this report.

2.2 Method for Assessing Potential Funding Needs

At the time the Committee was convened, it was recognized that it would be desirable to assemble a comprehensive listing of actions and associated costs for implementing watershed plans. For the reasons discussed in Section 2.1, it is apparent that such a listing cannot be assembled at this time. Further progress can be made, however, in 2003 and 2004, as the first watershed plans are approved by Planning Units, deliberated by the public, and ultimately approved by the legislative authorities of the respective counties involved.

In the absence of sound data on planned actions, the Committee discussed a variety of approaches to carrying out its assigned activities. The Committee decided to research "representative" projects that have been either undertaken or defined at a detailed level somewhere in the State of Washington or Pacific Northwest. EES staff identified representative projects or programs, and contacted applicable staff or involved organizations, other experts or reviewed reports from local water districts, conservation districts, and state departments to obtain information on costs and scope.

In some cases, specific examples of projects or programs were less helpful, due to the wide variability in cost among similar projects. For example, well construction costs can vary significantly depending upon the underlying rock structure. In these cases of significant variability from project to project, standard industry costs were used if such standards could be readily identified. These standard costs are averages and therefore factor in variability among projects. In a few instances, project and program detail was provided by experts in the respective fields, or pulled from technical reports produced by local jurisdictions or state agencies.

The location of projects and programs is an important factor in the scope and ultimately the costs of projects and programs. Differences in population density, climate, and the natural

environment may make a project more or less expensive. Therefore, efforts were made to review representative programs and projects located throughout the state of Washington.[1]

2.3 Results of Preliminary Funding Needs Assessment

Using the approach described above, Table 2-2 provides an illustrative overview of representative costs associated with implementing projects from watershed plans. For purposes of consistency, all costs include an up-front capital cost, as well as annual operations and maintenance costs estimated over a ten-year time frame. Further documentation of representative projects and assumptions is included in Appendix D.

Data from representative projects was not obtained for every category of action listed in Table 2-1. Categories for which costs were not obtained include:

- Water Quantity:
  - Restrict siting of new wells near streams
  - Encourage agreements to share regional supplies
  - Construct new or upgrade existing on-channel storage facilities
  - Promote greywater segregation
- Water Quality
  - Create a pollution trading system
  - Require hatcheries to follow Hatchery Scientific Review Group Recommendations
  - Implement existing water quality plans
  - Update and adjust local land use plans, shoreline programs, critical areas ordinances to achieve consistency with watershed plans
  - Create and implement stormwater management programs

[1] In one instance, project costs were derived from outside the state: a transmission line construction project located in Portland, Oregon.

Table 2-2
Cost of Representative Projects and Programs

Action Category	Basis for Cost	Representative Project/Program		Costs per Individual Project/Program			
				Capital Costs		Annual On-Going	
		Small	Large	Small	Large	Small	Large
Water Quantity							
Conservation Programs (Municipal & Industrial)	City of Bremerton (small), City of Tacoma (large)	City of Bremerton	City of Tacoma	$2,500	$5,000	$26,500	$395,000
Conservation Programs (Irrigation District)	Yakima River Basin Water Enhancement Projects	1/3 of large	Median of Yakima River basin irrigation districts projects	$6,000,000	$18,000,000	$300,000	$900,000
Conservation Programs (On-Farm)	Industry standard estimate to convert from gravity to pressure	250 acres	1,000 acres	$250,000	$1,000,000	$37,500	$150,000
Voluntary Transfers of Water Rights - Sales[1]	Walla Walla Basin water rights purchase	100 acre feet	1,000 acre feet	$60,000	$600,000	none	none
Voluntary Transfers of Water Rights - Leases[1]	Hypothetical Walla Walla Basin water rights lease	100 acre feet	1,000 acre feet	$6,000	$60,000	none	none
Adjudication of basin	Yakima River Basin adjudication	10 years	10 years	nominal	nominal	$1,000,000	$1,000,000
Watermaster or similar	Current watermaster data	0.5 FTE	1 FTE	$20,000	$20,000	$30,000	$55,000
Replace private wells with public system connections	Skagit County Public Utility District	100 miles of pipeline	100 miles of pipeline	$9,606,000	$9,606,000	$115,200	$115,200
Restrict well depth to second aquifer or lower	Industry standard estimate of well drilling costs	Increase depth 50 feet for 150 new wells per utility	Increase depth 50 feet for 150 new wells per utility	$12,000,000	$12,000,000	nominal	nominal
Alter operations of existing storage facilities	Seattle City Light's Skagit River Project	3 dams	3 dams	nominal	nominal	$220,000,000	$220,000,000
Construct and operate reclamation and reuse facilities	Average cost of Ephrata, Yelm, and Sequim projects	1 mgd production	10 mgd production	$8,800,000	$88,000,000	$200,000	$2,000,000
New well construction	Industry standard estimate of well drilling costs	Shallow aquifer; well sited near other wells	Deep aquifer; well siting in a new location	$46,000	$106,000	$7,500	$7,500
New stream diversions	Lake Kachess augmentation	Divert 2 streams to augment Kachess reservoir	Divert 2 streams to augment Kachess reservoir	$12,200,000	$12,000,000	$122,000	$122,000
New or upgraded surface storage (off channel)	Judy Reservoir raising	Raise dam 10 feet	Raise dam 10 feet	$10,000,000	$10,000,000	nominal	nominal
Aquifer Storage Recharge	City of Walla Walla	2 wells to produce 4,900 gpm	2 wells to produce 4,900 gpm	$1,800,000	$1,800,000	$180,000	$180,000

[1] Includes transfers to State of Washington Water Rights Trust Program. Also includes transfers among water users.

Table 2-2 (cont)
Cost of Representative Projects and Programs

Action Category	Basis for Cost	Representative Project/Program		Costs per Individual Project/Program			
				Capital Costs		Annual On-Going	
		Small	Large	Small	Large	Small	Large
Water Quality							
Assist private industries improve wastewater discharge	Treatment facility upgrade (small) new treatment facility (large)	Industrial upgrade	Replace industrial WWTP	$25,000	$20,000,000	$--	$200,000
Improve municipal wastewater discharge quality	Enumclaw WWTP improvements (small) Centralia WWTP (large)	Municipal upgrade	Replace municipal WWTP	$135,000	$27,000,000	$--	$270,000
Increase inspections of dairies and enforcement of regulations	Ecology's current dairy inspection program	Increase of 3 Inspectors statewide	Increase of 6 Inspectors statewide	$30,000	$60,000	$196,000	$393,000
Monitor assist and enforce farm practices	Sunnyside Irrigation District monitoring and enforcement program	2 FTEs	4 FTEs	$25,000	$100,000	$50,000	$150,000
Capital projects	Dungeness tight-lining ditch and re-regulating reservoir (small) North Fork Nooksack sediment reduction (large)	Small scale project	Large scale project	$250,000	$500,000	$--	$--
Public education program	Bellingham Stream Management and Education Project	Community level program	County level program	$10,000	$20,000	$157,000	$314,000
Habitat							
Modifications to Habitat	Projects requested to Salmon Recovery Funding Board in 2002	Project requests to SRFB in 2002: Fish passage improvements, barrier removal, culvert removal, etc.					$57,208,716
Protect/restore floodplains to store water	Green River levee break (near Auburn)	2 breaks in existing levee	2 breaks in existing levee	$300,000	$300,000	nominal	nominal
Instream Flow							
Rule-making by Ecology	Agency administrative costs	Staff time/ expenses	Staff time/ expenses	NA	NA	To be determined	To be determined

Assumptions:
For examples where O&M costs are not available it was estimated to be 1 percent of the capital cost.
Where annual ongoing costs are not included they are considered to be nominal.

In addition to reviewing costs of representative projects, the Committee explored how these costs might be extrapolated statewide to provide an estimate of total cost for implementing the actions in watershed plans. This proved to be challenging, with high uncertainty, for the reasons described in Section 2.1. An initial attempt at extrapolating costs statewide was carried out, and is presented in Appendix E. The total statewide extrapolation shown in the appendix amounts to approximately $5.9 billion. While this amount obviously represents a large investment, several comments are in order:

- The costs shown in Appendix E are estimates based on numerous assumptions. One assumption that has a large impact on the total is the number of projects in each category that will be recommended by planning units across the state. While the Appendix offers one estimate of the number of projects, the actual number could be quite different when plans are completed. Therefore, actual implementation costs may be substantially higher or lower than the estimated total.

- The resource requirements for the implementation of watershed plans do not represent necessarily a "new" layer of water resource needs. Instead, watershed plans will partially overlap with existing needs for water-related infrastructure and programs. This consideration is described in greater detail in Section 4.1 of this report. The extent of this overlap cannot be defined at this time, due to inadequate information on projects that will be included in watershed plans. However, the Committee anticipates that this overlap may be extensive.

- While the estimate is highly uncertain, the Committee does believe that costs for constructing water infrastructure projects and implementing watershed management programs will probably be in the billions of dollars. This is due to the fact that watershed planning offers a comprehensive framework that addresses many different needs, including water supply, water quality improvements, instream flow management, and habitat enhancement. Each of these elements by itself has substantial cost implications. When they are combined, they represent a very large investment need.

- Many of the costs shown in the Appendix can be financed with existing funding sources, at the state, federal, and local levels. For example, projects that are eligible for funding from the Centennial Clean Water Fund, Public Works Trust Fund, Salmon Recovery Fund, and other sources represent a portion of the projects listed in the table. Moreover, many of these projects may be funded, at least in part, by federal, local, or even private sector sources. Further information on this point is provided in Section 4 of this report.

- At the same time, the Committee believes that existing funding sources cannot adequately fund all of the projects that will be needed. State action will be needed in order to provide adequate funding for implementation of the actions contained in watershed plans.

- Expenditures on water resources should be viewed as a critical investment in the State's future. The State's watershed planning program is designed to improve access to water supplies, support economic development, improve water quality, enhance ecosystem health, and restore fish habitat. While the costs are substantial, the potential benefits to citizens of the State are also very high. The value of watershed planning is that, by reviewing watershed needs and potential solutions in a comprehensive framework, the projects and programs recommended should be better able to provide value for multiple objectives, and to reduce duplication. This approach can also help to avoid unintended, negative impacts that can occur with more narrowly focused efforts. Therefore, though the total cost appears high, watershed planning actually offers the potential to maximize the benefits of water resource investments.

2.4 Costs for Coordination and Oversight of Watershed Plan Implementation

Section 3 of this report discusses the importance of coordination and oversight during the implementation process. Effective approaches to coordination and oversight are vital to ensuring the success of watershed plans. Yet these activities will also require funding, above and beyond the costs of infrastructure projects and watershed management programs themselves.

Costs for coordination and oversight are relatively small, in comparison with costs for infrastructure projects and watershed management programs. The Committee estimates that coordination and oversight for a "typical" WRIA will cost on the order of $100,000 per year. This amount would cover elements such as:

- Staff to track implementation, work with implementing agencies to shape projects and resolve conflicts, continue meeting with Planning Units or their successor groups to review progress and make recommendations, organize ongoing data collection and management efforts, pursue grant and loan opportunities, oversee contracts, and coordinate adaptive management responses as needs and conditions change.
- Office space and equipment related to these activities.
- Expenses associated with these activities, such as travel, telephone, report reproduction and mailing, etc.

Without providing this "focal point" during the implementation process, there is a risk that the collective momentum gained during the planning phase will dissipate, and slow or hinder implementation. Therefore, this expenditure appears to be a valuable investment in the success of the overall watershed planning effort. Section 4.4.1 presents a proposal for State funding of this amount, including a matching requirement and gradual phaseout.

2.5 Costs for Supporting Activities

As noted in Section 1, a third category of activities in the implementation phase will be "supporting activities." These include elements such as long-term monitoring efforts, data management and analysis, periodic evaluation of program effectiveness, and public outreach and education. These activities also have associated costs. At this time the Committee has not developed a comprehensive estimate of these costs. They may vary substantially from WRIA to WRIA, depending on the nature and content of the watershed plans produced.

These costs are not included in Table 2-2, nor in Appendix E. In general these costs may be on the order of 5 to 15 percent of the costs of the actions discussed in Section 2.3. While supporting activities will cost far less than the actions listed in Table 2-2, they will need to be accounted for and funded, if watershed plan implementation is to be successful.